



**Public Safety Communications
Advisory Commission (PSCC)
& Public Safety Interoperable
Communications (PSIC) Office**

**Arizona Statewide
Education and Outreach Plan
Regarding Public Safety
Communications Interoperability
2012**

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This document was prepared under a grant from the Federal Emergency Management Agency's Grant Programs Directorate (FEMA/GPD) within the U.S. Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of FEMA/GPD or the U.S. Department of Homeland Security.

EXECUTIVE SUMMARY

The mission of Arizona's Statewide Communications Interoperability Plan (SCIP) is to advance public safety communications interoperability statewide. The goal of SCIP Strategic Initiative 5.8.5.1 is to "create and implement an Education and Outreach Plan in support of interoperable communications that describes the plan for encouraging collaboration and educating policy makers and practitioners."¹

This Statewide Education and Outreach Plan regarding Public Safety Communications Interoperability (the "Plan") has been developed to provide outreach and education strategies and resources to advance interoperable communications initiatives which impact Arizona.

Since Arizona consists of so many different jurisdictions at varying stages of interoperability, no single approach would be appropriate for all jurisdictions. Therefore, the information contained in this document should be tailored to best fit the circumstances and situational needs of stakeholders involved in promoting and improving communications interoperability in each community.

This Plan is presented in seven sections:

1. **Introduction:** Background information regarding the creation of the Plan, its purpose, and challenges to outreach activities.
2. **Goals:** Goals supported by the Plan that will strengthen interoperable communication efforts across the State.
3. **Fundamental Messages:** Significant messages about the benefits of achieving interoperable communications which are relevant to any subject that may be referenced during education and outreach activities.
4. **Outreach Tactics:** Education and outreach communication methods that can be employed by stakeholders.
5. **Stakeholder Roles:** Responsibilities of Outreach Target Audiences at all levels of government.
6. **Targeted Interoperability Topics:** Specific outreach topics which were determined to be of high priority in 2012. Each topic is organized into two parts:
 - Background: Key information about the targeted Interoperability subject area.
 - Supporting Materials: Existing resources are listed for convenient reference.
7. **Next Steps:** Stakeholder responsibilities for continued efforts in support of interoperable communications education and outreach.

¹ Arizona's SCIP Strategic Initiatives and Supporting Objectives can be found in Appendix A.

1.0 INTRODUCTION

Background – The Public Safety Interoperable Communications (PSIC) Office began development of a Statewide Education and Outreach Plan in support of interoperable communications in 2010. The PSIC Office, in conjunction with the U.S. Department of Homeland Security (DHS) Office of Emergency Communications (OEC), held an Outreach Session as part of its April 13, 2010 Statewide SCIP Implementation Workshop. Key policy areas briefed during the workshop included:

- Preparing to Prove Compliance with National Emergency Communications Goals
- Meeting the FCC Narrowbanding Requirements
- Arizona's Statewide Interoperability Goals & SCIP Initiatives
- Regional Interoperability Planning
- Key Initiatives including Arizona Interagency Radio System (AIRS), Communication Assets Survey and Mapping Tool (CASM) and Tactical Interoperable Communications Plans (TICPs)

Following the presentations, attendees participated in breakout sessions designed to identify key local stakeholders and priorities for outreach and education opportunities relevant to these key policy areas. The information gathered during the breakout sessions was used as a basis for developing this Plan, in addition to the in-depth experience of the PSIC Office's staff through their statewide education and outreach efforts.

Purpose – The purpose of this Education and Outreach Plan is to:

- Provide information and resources to emergency response policy makers and practitioners about interoperable communications initiatives and directives that impact the State.
- Describe the roles, responsibilities and opportunities for involvement of PSCC, SIEC, regional partners and all Federal, State, local and Tribal agencies/organizations in interoperable communications education and outreach.
- Encourage participation and give direction to stakeholders for supporting education and outreach activities regarding Arizona's interoperable communications initiatives.

Stakeholder engagement efforts by PSIC Office staff are detailed in the PSIC Office Plan, which is available online at: <http://www.azpsic.gov/initiatives/default.htm>.

Challenges – In a vast State with many remote areas and critical public safety needs to address, it is difficult for all stakeholders from the public safety community to feel that their voices are heard in regard to interoperable communications initiatives. All stakeholders should be encouraged to support the distribution of information to all areas of the State, communicate barriers facing communities in advancing interoperable communications and actively recommend and implement viable solutions.

2.0 GOALS

This Plan supports the following goals which are key to the success of interoperable communication efforts across the State:

- Educate and encourage collaboration among first responder policy makers and practitioners
It is critical to inform, educate and consult with policy makers and practitioners in support of statewide interoperability initiatives. This includes applicable Federal and State initiatives,

mandates, requirements, guidelines and efforts related to interoperable communications. It is also critical to foster collaboration among disparate Federal, State and local partners.

- Build and sustain statewide interest and involvement in PSCC, SIEC, and their Workgroups
Increasing awareness of and promoting participation in activities of the Public Safety Communications Advisory Commission (PSCC), the Statewide Interoperability Executive Committee (SIEC) and their Workgroups will result in more effective advancement of Arizona's strategic interoperable communications initiatives. This will also promote collaboration among stakeholders.
- Combine efforts and leverage knowledge and expertise
Opportunities for involvement in and contributions to communications interoperability efforts must be actively advocated and supported at all levels for the purpose of combining efforts and leveraging knowledge and expertise of multiple stakeholders for the good of the State as a whole. Sharing lessons learned and strengthening partnerships among agencies should be encouraged.
- Engage stakeholders as messengers
Stakeholders of all types statewide can be messengers regarding the importance of public safety interoperable communications with their constituencies. The feedback solicited from stakeholders can then be shared with policymakers.
- Inform leadership
Leadership at all levels of government (Federal, State, regional, local and Tribal) must be aware of why communications interoperability is essential, what issues and gaps exist across the State and how to move forward to address those issues and close such gaps.

3.0 FUNDAMENTAL MESSAGES

The following are key messages regarding communications interoperability.

- Communications interoperability saves lives.
- Communications interoperability should be a significant priority for stakeholders at all levels of government (Federal, State, regional, local and Tribal).
- Statewide efforts to improve communications interoperability are ongoing and defined through initiatives included in Arizona's SCIP (which is updated annually).
- There are many opportunities for involvement in the implementation of key SCIP initiatives.
- Stakeholder input and participation in PSCC, SIEC, and their associated Workgroups is critical to advancing communications interoperability.
- Best practices for enhancing communications interoperability should be propagated throughout Arizona by means of widespread outreach and education of stakeholders.
- Achieving communications interoperability requires planning, education and collaboration.
- Through the effective use of interoperable communications, emergency response professionals will be able to improve the efficiency and quality of their incident response, management and operations.

- The National Incident Management System (NIMS) Incident Command System (ICS) supports the development and use of a common communications plan and interoperable communications processes and architectures.

4.0 OUTREACH TACTICS

To accomplish the goals of this Plan, stakeholders must proactively employ tactics that will most effectively communicate fundamental messages and information as follows:

Meetings and Gatherings

Regional or statewide meetings, conferences, workshops, exercises and other collaborative events allow organizers to share information about the benefit of, and the methods that can be used to achieve, interoperable communications. These occurrences must be promoted to appropriate stakeholders in order to encourage attendance and participation. Likewise, attendance from a diverse group is needed to ensure that stakeholders of all disciplines and from various organizations are receiving critical information to support their efforts.

Traveling to communities and meeting with stakeholders is one of the best ways to understand the challenges facing Arizona's diverse jurisdictions in their efforts to advance interoperable communications.

Making Personal Contact

One-on-one and follow-up meetings with interested parties who may benefit from interoperable communications are also useful tactics for communicating information among stakeholders. Emphasis should be placed on educating key individuals with regional influence to empower them to share with their constituents regarding the benefit of—and the methods that can be deployed to achieve—interoperable communications. Individuals may also be contacted through telephone calls to handle preliminary discussions prior to travel to remote areas.

Utilizing Electronic Resources

Electronic tools should be utilized to reach large and distant audiences whenever possible. Electronic contact methods such as email and email distribution lists should be readily employed, and Internet resources—websites, blogs and electronic bulletin boards—should be employed as instruments for disseminating information.

The PSIC Website at <http://www.azpsic.gov> serves as a resource for reaching interested parties and distributing data to a host of recipients through electronic means. Important information regarding communications interoperability matters are posted to the site and continue to be updated regularly. Listed below are samples of the breadth of material on the PSIC Website:

- Arizona's SCIP: <http://www.azpsic.gov/initiatives/default.htm>
- Calendars of PSCC/SIEC Meetings: <http://www.azpsic.gov/meetings/calendar.htm>
- Meeting Minutes, Presentations & Handouts: <http://www.azpsic.gov/meetings/minutes.htm>
- Publications & Reports: <http://www.azpsic.gov/library/reports/default.htm>
- Public Events Calendar: <http://www.azpsic.gov/meetings/events.htm>
- Training Materials: <http://www.azpsic.gov/initiatives/training/default.htm>

The placement of links to the PSIC Website on partner Websites is highly encouraged.

Utilizing Print and Visual Resources

Education and outreach materials should be produced as appropriate. Examples of physical outreach resources include (but are not limited to):

- Brochures
- Direct mail training materials
- DVDs
- Fact Sheets
- Guides
- Handouts
- Information Packets
- Newsletters
- Promotional Items (i.e. Stickers, Magnets)

5.0 STAKEHOLDER ROLES

Outreach Target Audiences include members of Leadership, Technical/Communications Staff, Public Information Officers (PIOs), Responders, and other stakeholders. See Appendix B for a listing of many such key organizations.

Key State level leaders include, but are not limited to:

- Arizona Division of Emergency Management (ADEM), Arizona Department of Emergency and Military Affairs (DEMA)
- Arizona Department of Homeland Security (AZDOHS)²
- Arizona Department of Public Safety, Wireless Systems Bureau (DPS-WSB)
- Public Safety Communications Advisory Commission (PSCC) and Committees
- Public Safety Interoperable Communications (PSIC) Office, Arizona Department of Administration, Arizona Strategic Enterprise Technology Office (ADOA-ASET)
- Statewide Interoperability Executive Committee (SIEC) and Working Groups

Local partners in these efforts should provide expertise and guidance to leadership bodies within each county, since they approve policy and operational standards and likely control funding.

To make informed decisions, Leadership bodies must be knowledgeable of the technology, processes and requirements applicable to agencies within their scope of influence. It is critical for members of Leadership and public safety associations to: pass information to jurisdictional constituents, including Non-Governmental Organizations (NGOs) and utilities, which will aid in communications interoperability efforts; concentrate resources and develop standards to ensure adequate participation in and support of such efforts; and provide direction to Technical/Communications Staff and Responders.

Technical/Communications Staff members who control resources during incidents or events and are responsible for engineering and infrastructure should play a role in local and regional preparation and planning efforts, including outreach. Technical/Communications Staff is encouraged to share successful

² AZDOHS is Arizona's State Administrative Agency (SAA)

methodologies with others. In partnership with responders, they should provide constructive information to policy makers.

Stakeholders at all levels should pursue educational opportunities regarding interoperable communications practices and technologies to further improve their level of knowledge.

6.0 TARGETED INTEROPERABILITY TOPICS

In addition to general outreach regarding communications interoperability, including the SCIP and its key Strategic Initiatives (see Appendix A), outreach efforts in 2012 will focus on three key interoperability topics:

1. FCC Narrowbanding Compliance
2. National Public Safety Broadband Network (NPSBN)
3. NECP Gap Closure (Regional Interoperability Planning: CASM, TICPs, SCMPs and other Resources)

6.1 FCC Narrowbanding Compliance

6.1.1 Background

- The Federal Communications Commission (FCC) requires that all Part 90 VHF (150-174 MHz) and UHF (421-512 MHz) Private Land Mobile Radio (PLMR) system licensees must convert from what has been known as "wide-band" (25 KHz) operation to "narrow-band" (12.5 KHz or equivalent) operation by January 1, 2013. Although the cost of narrowbanding may seem prohibitive, compliance is required by the FCC.
- The FCC has indicated it will NOT extend the compliance deadline. Waivers will be reviewed, if requested, but they will also be carefully scrutinized. After January 1, 2013, the FCC states that licensees not operating at 12.5 kHz efficiency will be in violation of the Commission's rules and could be subject to FCC enforcement action, which may include admonishment, monetary fines, or loss of license.
- As of January 1, 2011, no new systems have been licensed to use Wide Bandwidth. Additionally, no existing systems using Wide Bandwidth will be allowed to expand, and the manufacture or import of 25 kHz equipment is prohibited.
- Agencies are responsible for preparation and should be well into the process of Implementation Planning:
 - Radios must be inventoried to determine what needs to be upgraded or replaced.
 - Infrastructure including repeaters, base stations, satellite voting receivers and comparators and paging transmitters must also be inventoried to ensure narrowband capability.
 - Purchases must be planned to allow for system reconfiguration and upgrades, as well as unintended risks and delays.
 - Partners should be contacted to determine appropriate scheduling for reprogramming to maintain interoperability.
 - Site engineering should be reviewed for adequate signal coverage, simulcast holes, fringe and in-building coverage.

- Additionally, on January 1, 2017, all Part 90 Public Safety 700 MHz radio systems in the General Use and State License allocations must cease operating on narrowband radio transmitters with efficiency of 12.5 kHz per channel, and must migrate to ultra-narrowband technology with efficiency of 6.25 kHz per channel. This deadline does not apply to VHF or UHF radio systems.

6.1.2 Supporting Materials

- A narrowbanding overview, countdown and additional resources are featured on the PSIC Website: <http://www.azpsic.gov/library/narrowbanding/>. Resources include:
 - FCC Narrowbanding Mandate: A Public Safety Guide for Compliance – The International Association of Fire Chiefs (IAFC) and the International Municipal Signal Association (IMSA) created a brochure to provide guidance to public safety entities on narrowbanding requirements.
 - Narrowbanding 101 Article – Developed by the National Public Safety Telecommunications Council (NPSTC), SAFECOM and National Council of Statewide Interoperability Coordinators (NCSWIC) Narrowband Work Group for public safety officials, the article provides an overview of the FCC Narrowbanding requirements, how to prepare for narrowbanding, and additional information resources.
 - January 26, 2011 VHF/UHF Narrowbanding workshop archive video – The Public Safety and Homeland Security Bureau of the FCC conducted a workshop to assist licensees in completing the transition to narrowband radio communications. Information regarding the Narrowbanding transition path is presented, as well was input from Federal agencies, equipment manufacturers, and public safety organizations to help ensure timely compliance with the deadline.
- The FCC published an online tool in 2011, the Narrowband License Status Tool, which visually displays the current narrowband license status by state: http://publicsafetytools.info/start_nb_status.php.
 - The Narrowband License Status Tool allows users to view VHF and UHF licensing data for transmitters subject to the FCC narrowbanding mandate. The data can be mapped as a Google Maps overlay with colored pushpins corresponding to how the transmitters are licensed. The tool also enables users to generate Microsoft Excel reports with detailed FCC licensing data for each transmitter.
- To aid communities in monitoring the progress of narrowbanding efforts in their area, OEC released a Narrowband status reporting tool, the Narrowband Summary Tracker, to go along with the Narrowband License Status Tool. It is available online at: http://publicsafetytools.info/narrowband/national_tracking.php.
 - The Summary Tracker enables users to view Narrowband status maps and reports at the National, State, and County level that are updated weekly. The tool also enables users to generate Microsoft Excel reports with summary data to monitor progress over time.
- Additional narrowbanding information is available online at:
 - www.fcc.gov/narrowbanding
 - www.dhs.gov/narrowbanding
 - www.npstc.org/narrowbanding.jsp

6.2 National Public Safety Broadband Network (NPSBN)

6.2.1 Background

- Broadband refers to advanced communications systems capable of providing high-speed transmission of data, voice, and video over the Internet and other networks.
- Following the terrorist attacks on September 11, 2001, the 9/11 Commission recommended the establishment of a nationwide, interoperable public safety communications network to resolve communications challenges faced by emergency responders. For the past decade, public safety worked with State and local government officials, the Federal government, and Members of Congress to amass support for a nationwide network.
- At the March 2, 2011 SAFECOM Executive Committee (EC) Meeting, a concept for the Public Safety Wireless Broadband Network was proposed. The proposal included an overview of the difference between a network-of-networks approach and a single nationwide network approach. The EC voted to recommend a single nationwide wireless broadband network approach to DHS.
- As it stands today, wireless broadband will supplement—not replace—land mobile radio (LMR) for voice communications. The current capabilities of wireless broadband make it a valuable addition to LMR as a communications tool for emergency responders.
- On February 22, 2012, the President signed the Middle Class Tax Relief and Job Creation Act of 2012 (H.R. 3630), which includes legislation to create the NPSBN. Key provisions of Title VI of the legislation include:
 - Reallocates the 700MHz “D-Block” spectrum to Public Safety
 - Authorizes the FCC to conduct incentive auctions to raise \$7 billion for building and managing the nationwide network
 - Authorizes the creation of a nationwide governance structure, the First Responder Network Authority (First Net)
 - Ensures access to the NPSBN by State, local, and Tribal users, as well as Federal responders and secondary users
 - Establishes a State and Local Implementation Fund of up to \$135 million managed by National Telecommunications and Information Administration (NTIA) to support planning and implementation efforts [Note: Each State is further required to designate a single officer or governmental body to consult with First Net and coordinate the implementation of grant funds.]
 - Requires a giveback of television band frequency currently allocated to some jurisdictions [Note: No impact on Arizona.]
- The Arizona Statewide Interoperability Coordinator (SWIC), manager of the PSIC Office, will support the adoption of interoperable wireless broadband in the State by identifying wireless broadband stakeholders throughout the State and engaging them with current interoperability governance structures (including PSCC and SIEC).

- PSIC will garner input and advice from PSCC, SIEC, Digital Arizona (ADOA-ASET), 9-1-1 Office (ADOA-ASET), DPS, AZDOHS and stakeholders statewide, in other states & at the Federal level in researching and developing recommendations

6.2.2 Supporting Materials

- The PSIC Office has dedicated a webpage to information about standards-based development of wireless broadband systems in the 700 MHz public safety spectrum at: <http://www.azpsic.gov/library/broadband/>.
- OEC offers guidance documents on its website at: <http://www.safecomprogram.gov/oecguidancedocuments/Default.aspx>. Broadband-related documents include the Public Safety Communications Evolution Brochure and the Interoperability Planning for Wireless Broadband document.
 - The Interoperability Planning for Wireless Broadband document was created in coordination with the emergency response community, to assist Statewide Interoperability Coordinators with planning for wireless broadband use in emergency communications. Included in the Appendices are: Organizations Working on Nationwide Public Safety Broadband; and Broadband Grants and Resources.
 - The Public Safety Communications Evolution brochure was developed to help educate the public safety community and elected and appointed officials about the future of emergency communications; describe the evolution of emergency communications and how traditional land mobile radio (LMR) communications used today may converge with wireless broadband in the future if specific requirements are met; and further discuss some of the most important requirements that must be met to achieve the desired long-term state of convergence.
- OEC published a summary of the NPSBN and related communications and spectrum provisions of Title VI of the Middle Class Tax Relief and Job Creation Act of 2012. The document is available on the PSIC Website at: http://www.azpsic.gov/news/2012/NPSBN_Legislation_Summary_0212.pdf.
- The National Public Safety Telecommunication Council (NPSTC) has published an online directory to a wide range of current information on the nationwide efforts to bring broadband to public safety: <http://www.npstc.org/broadbandDirectory.jsp>

6.3 NECP Gap Closure (Regional Interoperability Planning: CASM, TICPs & SCMPs, AIRS and Other Resources)

6.3.1 Background

NECP Assessments

- Federal Department of Homeland Security (DHS) is requiring each State to demonstrate compliance with the National Emergency Communications Plan (NECP), which describes national goals and objectives to improve interoperability, operability and continuity of communications across all levels of government. NECP has the following three high-level goals:
 - Goal 1: By 2010, 90 percent of all high-risk Urban Areas designated within the Urban Area Security Initiative (UASI) are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.

- Goal 2: By 2011, 75 percent of non-UASI jurisdictions are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.
 - Goal 3: By 2013, 75 percent of all jurisdictions are able to demonstrate response-level emergency communications within three hours of a significant event as outlined in national planning scenarios.
- NECP Goal One assessments were conducted for Phoenix and Tucson UASIs (Maricopa and Pima Counties, respectively) in 2010.
- The remaining thirteen Non-UASI Arizona Counties were required to demonstrate Goal Two performance in 2011. Counties were assessed using the same criteria as the NECP Goal One assessments, including the use of plain language and NIMS compliant policies and procedures.
 - ICS is a key feature of NIMS and is intended to aid in the administration of resources during incidents. It is a standardized management system designed to enable effective and efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. ICS is used by all levels of government—Federal, State, local, and Tribal—as well as by many NGOs and private-sector entities. ICS has become the standard for emergency management across the country and is applicable across disciplines.
- The PSIC Office worked with Arizona’s 13 non-UASI counties to assess their ability to demonstrate response-level emergency communications during a routine event.
 - Events were to be managed in accordance with National Incident Management System (NIMS) and included large public gatherings that required participation from multiple public safety agencies and jurisdictions.
 - Observed events included participation from 116 State and local public safety agencies and Non-Governmental Organizations (NGOs), 12 Tribal agencies and six Federal agencies.
- NECP Goal Two assessments were an important step in Arizona’s ongoing efforts to assess progress and improve interoperable emergency communications. As a result of the assessments, the PSIC Office published the Arizona Compendium of Findings and Recommendations from National Emergency Communications Plan (NECP) Goal 2 Observations, which documents the key findings from all of the NECP Goal Two observations.
 - The Compendium includes the best practices, lessons learned, and recommendations developed by the observation teams.
 - The PSIC Office determined that a majority of the non-UASI counties have instituted the necessary capabilities to achieve interoperability among multiple agencies and jurisdictions during large-scale planned events and will use the results to better target its policy, planning, and support services to address the gaps and needs identified.
- The PSIC office will support jurisdictions in their NECP gap closure efforts and regional interoperability planning efforts by providing technical assistance, planning and support services to improve response level emergency communications. Examples of services include:

- TICP development support
- Targeting of Communications Unit Leader Training
- Development & Distribution of template policies and SOPs
- Development of Federal grant applications
- Requests for technical assistance services
- Support to Counties with their countywide improvement efforts

CASM

- The Communication Assets Survey and Mapping (CASM) Tool is provided by DHS OEC through the Interoperable Technical Assistance Program (ICTAP). CASM is a web-based tool to support interoperable communications analysis and is composed of two components: the Communication Assets Survey (CAS) and the Communication Assets Mapping (CAM) tool.
 - The CAS component provides a means to enter, edit and delete information about agencies, communication assets (such as radio systems, dispatch centers, mutual aid channels/systems, gateways and radio caches) and agency usage of the assets.
 - The CAM component provides a means to display this information in a map-based interface and analyzes the data to display agency-to-agency interoperability in various ways.
- Use of CASM is included in Arizona's SCIP Strategic Objective 5.8.1.2, Objective 1. The CASM Tool is intended to provide a single repository for information about land mobile radio systems, interoperability methods and how they are used by public safety agencies within a state or urban area to facilitate information sharing for inter-agency interoperability analysis, gap analysis and needs evaluation purposes.

TICPs & SCMPs

- A Tactical Interoperable Communications Plan (TICP) documents the interoperable communications resources available within a designated area and define how resources are controlled and shared according to existing rules of use or operational procedures for the activation and deactivation of each resource. TICPs enable:
 - Understanding of the level of communications interoperability between agencies/regions
 - Identification of communications interoperability gaps
 - Information with which to create Investment Justifications and Funding Requests
 - Development of plans to close gaps and improve interoperability
- A Strategic Communications Migrations Plan (SCMP; formerly Regional Interoperable Communications Plan [RICP]) provides a coordinated basis for interoperable communications planning, programming, and budgeting. The Strategic Plan:
 - Identifies and prioritizes regional communications requirements
 - Defines regional operational needs and identifies commonalities between local and regional goals and needs of various stakeholder groups
 - Develops regional migration goals and priorities that capitalize on those commonalities

- Establishes milestones to facilitate achieving each goal and priority

Interoperable Channels Plan/Priority Programming Guides

- The Arizona Interoperable Channels Plan, approved by the SIEC and updated as necessary, establishes requirements and/or recommendations for programming of statewide interoperable channels into subscriber units and to provide guidance on the use of the interoperable channels during day-to-day and emergency use.
- Arizona's Priority Programming Guides were created and approved by SIEC as a supplement to the Channels Plan in order to standardize and increase interoperable communications throughout the state in the VHF, UHF, 700 and 800 MHz bands. It is suggested that each agency incorporate the channels from the Programming Guides into their channel plan the next time their radios are programmed, but no later than the initial narrowbanding deadline of January 1, 2013.

AIRS

- AIRS is a suite of cross-banded mutual aid channels designed to provide basic interoperable communications capability to Arizona public safety agencies. The AIRS system operates on locally designated interoperability frequencies in the VHF, UHF and 800 MHz bands and connects users on disparate radio systems and bands in the event of multi-agency, multi-discipline, and/or multi-jurisdictional operations.
- Agencies should actively encourage the use of AIRS for interoperability in situations involving multiple agencies and/or jurisdictions. In order to use AIRS, an agency must sign a Memorandum of Understanding (MOU) with the Arizona Department of Public Safety (DPS).

6.3.2 Supporting Materials

- The PSIC training materials webpage (<http://www.azpsic.gov/initiatives/training/default.htm>) includes information about Training and Exercise Strategic Initiatives and provides links to NIMS/ICS, Communications Unit Leader (COML), AIRS, and other training resources.
- The Arizona Compendium of Findings and Recommendations from National Emergency Communications Plan (NECP) Goal 2 Observations is available the PSIC Website with additional information regarding NECP goals at: <http://www.azpsic.gov/library/necp/>.
- CASM related information is online at: <http://www.azpsic.gov/library/casm/default.htm>. Qualified individuals may request access to CAM by submitting the completed required User Account Request and Approval Form (online at <http://www.azpsic.gov/CASM>).
- Additional information about TICPs, including the document template, is available online at: <http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=140>
- The Arizona Interoperable Channels Plan and associated Priority Programming Guides are online at: <http://www.azpsic.gov/library/standards/default.htm>.
- The AIRS MOU and training program information is available on the PSIC Website: <http://www.azpsic.gov/library/airs/default.htm>.
- AIRS Training materials may also be requested from the PSIC Office by emailing psic@azpsic.gov. The materials include:
 - AIRS Training Video in DVD Format (produced in cooperation with the Phoenix Fire Department)

- AIRS Usage Lesson Plan
- AIRS Training Presentation
- AIRS National Interoperability Field Operations Guide (NIFOG) Stickers

7.0 NEXT STEPS

It is the aim of this Plan that stakeholders in all areas of public safety will combine efforts, leverage their expertise, share success stories and work in partnership to move the State forward in achieving communications interoperability.

As stakeholders continue their outreach and education efforts in support of interoperable communications we hope they will provide feedback regarding the effectiveness of our fundamental messages, topical information and supporting materials presented in this Plan. Stakeholders are encouraged to provide feedback, concerns and success stories to PSCC, SIEC and the PSIC Office at psic@azpsic.gov.

Annual reviews of this Plan will be conducted by the PSIC Office to determine if efforts are consistent with SCIP Initiatives and identified priorities. Updates will be made as determined necessary during the annual review process and revisions will be recommended to PSCC. Revised versions of this document will be effective once approved by PSCC.

APPENDIX A

AZ 2011 Statewide Communications Interoperability Plan (SCIP) Strategic Initiatives & Supporting Objectives

| | ID | SCIP Section | Strategic Initiative & Objectives | Term | Lead |
|----------------------|----|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|
| Governance | 1 | 5.8.1.1 | Expand and Implement Interoperable Communications Governance Model and Plan 1) Conduct an annual review and update the SCIP as needed 2) Continue to develop the relationship between and among statewide governance entities and evolving regional and local governance entities | Short (2012) | PSIC Office |
| | 2 | 5.8.1.2 | Develop Regional Communications Governance Structures 1) Develop TICPs and expand the utilization of CASM 2) Support tactical communications planning among federal, state, local, and tribal governments at the regional interstate level (NECP milestone) | Medium (2013) | PSIC Office |
| | 3 | 5.8.1.3 | Implement a Strategy for Supporting National Level Goals Applicable to Regional, State, Local and Tribal Interoperable Communications 1) Promote compliance with state, local and tribal objectives and milestones as listed in the NECP 2) Support assessment/demonstration of NECP goals at the state, local, and tribal level 3) Support implementation of FEMA and OEC initiatives 4) Promote compliance with evolving national public safety broadband standards and structures 5) Support narrowbanding in compliance with FCC mandates | Long | PSIC Office |
| SOPs | 4 | 5.8.2.1 | Establish a PSP Framework, and Implement PSPs, Including SOPs, for Statewide Interoperable Communications Solutions 1) Develop a statewide interoperable communications PSP Framework 2) Develop consistent interoperable communications SOPs and SOP templates 3) Implement developed SOPs statewide 4) Implement technical solutions to comply with established statewide PSPs 5) Develop a statewide public safety broadband integration/implementation strategy and related standards 6) Promote the use of plain language and decrease dependence on the use of coded substitutions (NECP milestone) | Short (2012) | PSIC Office |
| Technology | 5 | 5.8.3.1 | Enhance and Promote the AIRS Interoperable Communications Solution 1) Provide enhanced AIRS coverage in areas requiring additional support 2) Develop and Implement a Next Generation AIRS Plan | Short (2011) | PSIC Office/SIEC |
| | 6 | 5.8.3.2 | Implement, Enhance and Promote Functional Regional Systems in Support of Interoperable Communications 1) Encourage partnerships in regional shared systems 2) Support the development of new regional shared systems 3) Provide enhancements to existing regional shared systems 4) Develop interoperability connections between regional shared systems 5) Develop regional strategic technology assets and other communications redundancies 6) Program national interoperability channels into emergency responder radios (NECP milestone) | Long | Regional Partners |
| | 7 | 5.8.3.3 | Upgrade the Statewide Microwave Backbone Infrastructure to Digital Technology 1) Complete the Microwave Southern Loop Connectivity (2010 - Complete) 2) Complete the Microwave Southwestern Loop Connectivity (subject to funding availability) 3) Complete the Microwave Northwestern Loop Connectivity (subject to funding availability) 4) Complete the Microwave Northern Loop Connectivity (subject to funding availability) | Long | DPS/WSB |
| | 8 | 5.8.3.4 | Implement the State STR 1) Pre-position and secure mobile interoperable communications assets for immediate deployment to impacted areas statewide in an emergency or major disaster 2) Provide redundant communications assets which can reconstitute basic public safety/service communications in the event of a catastrophic communication failure 3) Augment COG capabilities by providing a reserve of communications assets to government officials 4) Define alternate/backup capabilities in ECPs (NECP milestone) | Short (2011) | ADEM |
| | 9 | 5.8.3.5 | Upgrade Operable Communication Systems for State Agencies in Support of Interoperable Communications 1) Develop a plan to provide State Agency Users with continued access to operable public safety/service LMR communications in support of statewide interoperability 2) Implement immediate solutions to enhance operable communication systems for State Agency Users in support of interoperable communications 3) Implement upgrades to operable communication systems for State Agency Users in support of interoperable communications | Long | DPS/WSB |
| Training & Exercises | 10 | 5.8.4.1 | Develop and Implement a Training Plan to Address Interoperable Communications 1) Develop regional multi-year communications-focused T&EPs 2) Develop a statewide multi-year communications-focused T&EP 3) Implement AIRS training statewide 4) Implement the COML Training and Recognition Program and develop Arizona based federally approved COML instructors 5) Implement a COMT Training Program and determine a credentialing protocol | Medium (2013) | PSIC Office |
| | 11 | 5.8.4.2 | Develop and Implement a Strategy for Exercises Focused on or Incorporating Interoperable Communications 1) Develop regional multi-year communications-focused T&EPs 2) Develop a statewide multi-year communications-focused T&EP 3) Conduct exercises focused on or incorporating interoperable communications | Medium (2013) | PSIC Office |
| Usage & Outreach | 12 | 5.8.5.1 | Create and Implement an Education and Outreach Plan in Support of Interoperable Communications 1) Develop and implement a statewide Education and Outreach Plan in support of interoperable communications that describes the plan for encouraging collaboration and educating policy makers and practitioners 2) Provide outreach to all stakeholders regarding NECP requirements and timelines 3) Provide outreach to all stakeholders regarding interoperable communications channels 4) Provide outreach to all stakeholders regarding FCC narrowbanding requirements and timelines | Short (2012) | PSIC Office |

APPENDIX B – OUTREACH TARGET AUDIENCES

| <u>Federal</u> | <u>Local/Tribal</u> | <u>Responders</u> |
|---------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------|
| Bureau of Indian Affairs (BIA) | City Council Members | Arizona Life Safety Council |
| Bureau of Land Management (BLM) | City Council Staff | Bus Drivers – School and Other |
| Congressional Leaders | City Managers | Citizen Fire Academy Graduates |
| Federal Communications Commission (FCC) | County Board of Supervisors | Citizen Police Academy Associate Members |
| Federal Department of Homeland Security (DHS) | County Emergency Managers | Emergency Medical Services (EMS) |
| Federal Emergency Management Agency (FEMA) | County Managers | Supervisors, Officers, Dispatchers |
| Federal Law Enforcement Agencies (ATF, FBI, USMS, USPS, etc.) | Fire Boards | Fire Departments (Supervisors, Officers, Dispatchers) |
| National Guard Association (NGA) | Fire Chiefs and Marshalls | Fire Districts |
| National Park Service (NPS) | General Service Departments | Hospitals |
| National Telecommunications and Information Administration (NTIA) | Grant Offices | Incident Management Teams |
| Office of Emergency Communications (OEC) | Mayors | K-9 Teams |
| U.S. Forest Service | Municipal Department Heads | Non Governmental Organizations (NGOs) with a Public Safety Mission |
| | School Boards | Police/Law Enforcement (Supervisors, Officers, Dispatchers) |
| | School Districts | Private Ambulance Companies |
| | Transportation Departments | Public Service Agencies |
| | Tribal Councils | Public Works |
| | | Utilities (APS, SRP, Water) |
| <u>State</u> | <u>Associations</u> | <u>Public Information Officers (PIOs)</u> |
| Arizona Department of Corrections | Arizona Ambulance Association | City PIOs |
| Arizona Department of Health Services (ADHS) | Chiefs' Associations (Police and Fire) | City Website Administrators |
| Arizona Department of Homeland Security | Fire District Associations | County PIOs |
| Arizona Department of Public Safety | League of AZ Cities and Towns | Governor's Office PIO |
| Arizona Department of Transportation (ADOT) | Local Emergency Planning Committees (LEPCs) | Local Television Media |
| Arizona Division of Emergency Management (ADEM) | National Council of Statewide Interoperability Coordinators (NCSWIC) | Local Radio Stations |
| Arizona Legislature | National Public Safety Telecommunications Council (NPSTC) | State Agency PIOs |
| Governor's Office | State Association of Public-Safety Communications Officials (APCO) | Public |
| Grant Offices | State National Emergency Number Association (NENA) | Tribal PIOs |
| Public Safety Communications Advisory Commission (PSCC) and Committees | | |
| State Land Department | | |
| State Agency Directors | | |
| Statewide Interoperability Executive Committee (SIEC) and Working Groups | | |
| <u>Regional</u> | <u>Technical/Communications Staff</u> | <u>Other</u> |
| Phoenix UASI | Communications Center (9-1-1) Supervisors and Staff | Civic Groups (Rotary/Kiwanis/Chambers of Commerce) |
| Regional Emergency Communications Coordination Working Group (RECCWG) | Agency Technical/Communication Staff | Critical Infrastructure Providers (Water and Electric) |
| Regional Advisory Councils (RACs): Central, East, North, South, West | Communications Unit Leaders (COMLs) | Grant Writers |
| Regional Emergency Medical Services Councils (AEMS, NAEMS, SAEMS, WACEMS) | Communications Center Managers | Military |
| Regional System Administrators (PCWIN, RWC, TOPAZ, YRCS) | Communications Center Staff | NGOs focused on public safety or public service (CAP, RACES, Red Cross) |
| Southeast Arizona Emergency Medical Services (SAEMS) Council | Communications Equipment Vendors | Public Schools |
| Southwest Border Working Group | Engineering Staff | Transportation Companies |
| Tucson UASI | Local Communication Agencies | |
| | Public Safety Answering Point (PSAP) Supervisors and Staff | |
| | Radio Communication Departments | |
| | Radio Technical Support Departments and Technicians | |
| | Technical Communications Personnel | |